

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF U.S. 1 (BUSINESS) AND TOLLGATE ROAD IN HARFORD COUNTY, MARYLAND. U.S. 1 BUSINESS IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE U.S. 1 APPROACHES OPERATING CONCURRENTLY AND THE TOLLGATE ROAD APPROACHES OPERATING SPLIT.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND AND SOUTHBOUND U.S. 1 APPROACHES.

CONTROLLER REQUIREMENTS

THE EXISTING BASE MOUNTED CABINET AND CONTROLLER WILL BE USED.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.04-01 (SHOULDER WORK) STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)
STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE) STANDARD NO. MD-104.04-15 (INTERSECTION LEFT LANE, TURN BAY)
STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)
STANDARD NO. MD-104.04-07 (CENTER LANE CLOSURE)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 321-2781/2785

MR. ROBERT SYNDER
ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7631

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 321-2761

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. MIKE PASQUARIELLO
ASSISTANT DISTRICT UTILITY ENGINEER
PHONE: (410) 321-2841

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

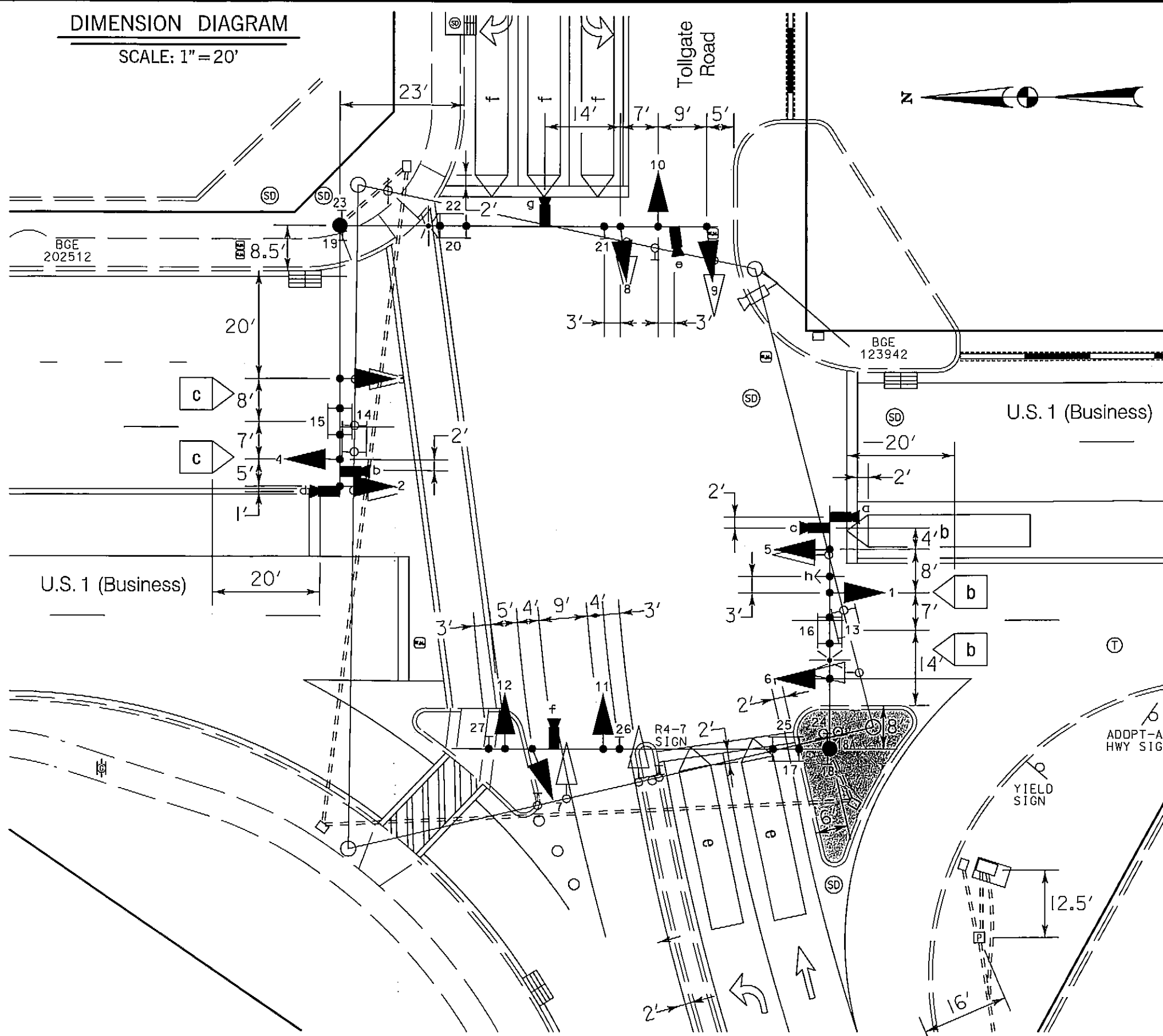
ITEM NO.	QUANTITY	DESCRIPTION
9086	1 EACH	VIDEO INTERFACE EQUIPMENT: 4-8 CAMERAS
9571	154 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF :
	2 EACH	R3-5(L) SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT
	1 EACH	R3-5(R) SIGN (30 IN. x 36 IN.) - MAST ARM MOUNT
	2 EACH	D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT
	1 EACH	ASSOCIATED SHIELD ASSEMBLY W/G "NORTH, BUSINESS U.S. 1, RIGHT ARROW" (24 IN. x 51 IN.) - POLE MOUNT
	1 EACH	ASSOCIATED SHIELD ASSEMBLY W/G "NORTH, BUSINESS U.S. 1, LEFT ARROW" (36 IN. x 75 IN.) - POLE MOUNT
	1 EACH	ASSOCIATED SHIELD ASSEMBLY W/G "SOUTH, BUSINESS U.S. 1, RIGHT ARROW" (24 IN. x 51 IN.) - POLE MOUNT
	1 EACH	ASSOCIATED SHIELD ASSEMBLY W/G "SOUTH, BUSINESS U.S. 1, LEFT ARROW" (36 IN. x 75 IN.) - POLE MOUNT
	2 EACH	M95-1 WHITE ON GREEN, "BUSINESS U.S. 1" (78 IN. x 24 IN.) - MAST ARM MOUNT

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 + 5	R	R	R	R	R	R	R	R	R	R	R	R
1 + 5 CHANGE	G	G	G	G	G	G	G	G	G	G	G	G
PHASE 1 + 6	R	R	R	R	R	R	R	R	R	R	R	R
1 + 6 CHANGE	G	G	G	G	G	G	G	G	G	G	G	G
PHASE 2 + 5	R	R	R	R	R	R	R	R	R	R	R	R
2 + 5 CHANGE	G	G	G	G	G	G	G	G	G	G	G	G
PHASE 4 + 8	R	R	R	R	R	R	R	R	R	R	R	R
4 + 8 CHANGE	G	G	G	G	G	G	G	G	G	G	G	G
PHASE 3	R	R	R	R	R	R	R	R	R	R	R	R
3 CHANGE	G	G	G	G	G	G	G	G	G	G	G	G
PHASE 4	R	R	R	R	R	R	R	R	R	R	R	R
4 CHANGE	G	G	G	G	G	G	G	G	G	G	G	G
EMERGENCY PRE-EMPTION 1	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY	FLY

DIMENSION DIAGRAM

SCALE: 1"=20'



EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	3 EACH	MAINTENANCE OF TRAFFIC
2002	3 C.Y.	TEST PIT EXCAVATION
5003	5 EACH	REM OF EXISTING PERM PVMT MARKING LETTERS, SYMBOLS, ARROWS AND NUMBERS
6002	375 S.F.	5 INCH CONCRETE SIDEWALK
8003	12 EACH	8 INCH LED SIGNAL HEAD SECTION
8004	3 EACH	ADJ EXISTING HANDHOLE TO GRADE INCLUDING COLLAR
8006	2 EACH	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH 250 WATT HPS LAMP & LUMINAIRE
8010	1 EACH	CONDUIT BEND IN EXISTING FOUNDATION - ANY SIZE
8021	1 EACH	REM & DISPOSE MAT & EQUIP PER ASSIGN
8024	2 EACH	TWIN MAST ARM POLE & 50 FT/70 FT MAST ARMS ANY 'T' DIMENSION
8025	6 EACH	UPDATED VIDEO DETECTION CAMERA & CABLE UP TO 500 FT
8031	225 L.F.	DISCONNECT, PULL-BACK & REROUTE CABLES
8033	100 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8034	110 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - SLOTTED
8035	170 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8038	154 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8040	365 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8042	1 EACH	METERED SERVICE PEDESTAL EMBEDDED
8044	100 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG - THHN/THWN
8047	1 EACH	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
8049	1 EACH	OPTICOM NO. 721 DETECTOR EYE
8050	36 EACH	12 INCH LED SIGNAL HEAD SECTION
8051	130 L.F.	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
8052	1 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
8056	90 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8057	2200 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8058	485 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TC

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
U.S. 1 (Business) and Tollgate Road
Bel Air, MD

GENERAL INFORMATION SHEET

SCALE: NONE ADVERTISED DATE: 6/29/2009 CONTRACT NO.: XX4465185

DESIGNED BY: S. Bloss COUNTY: Harford
DRAWN BY: S. Bloss LOGMILE: 12800101.75
CHECKED BY: N. Leary TMS NO.: J429
F.A.P. NO.: TOD NO.:

TS NO. 427 H DRAWING TSP-2 OF 2 SHEET NO. 2 OF 2

WR&A
WHITMAN, REQUARDT
& ASSOCIATES, LLP
801 South Caroline Street, Baltimore, Maryland 21231

PLOTTED: 06-29-2009
FILE: n:\91556-175\CAADD\SSG-N002_US1.dgn